AMENDMENTS TO THE CLAIMS

1.-12. (canceled)

13. (currently amended): ~~The microdevice of claim 11,~~ A microdevice, which microdevice comprises:

a) a substrate;

b) a photorecognizable coding pattern on said substrate; and

c) a binding partner that is capable of binding to a moiety to be manipulated,

wherein said photorecognizable coding pattern comprises a hole not penetrating through the entire depth of said substrate,

and wherein said microdevice comprises a magnetic material, or said binding partner comprises a cell, a cellular organelle, a virus, or an antibody,

and said microdevice has dimensions from about 1 to about 500 microns, and does not comprise an anodized metal surface layer;

wherein the substrate comprises a silicon layer and a metal layer;

wherein the metal layer comprises a magnetic material.

14. (currently amended): ~~The microdevice of claim 11,~~ A microdevice, which microdevice comprises:

a) a substrate;

b) a photorecognizable coding pattern on said substrate; and

c) a binding partner that is capable of binding to a moiety to be manipulated,

wherein said photorecognizable coding pattern comprises a hole not penetrating through the entire depth of said substrate,

and wherein said microdevice comprises a magnetic material, or said binding partner comprises a cell, a cellular organelle, a virus, or an antibody,

and said microdevice has dimensions from about 1 to about 500 microns, and does not comprise an anodized metal surface layer;

wherein the substrate comprises a silicon layer and a metal layer

wherein the metal layer comprises nickel metal or CoTaZr (Cobalt-Tantalum-Zirconium) alloy.

15.-32. (canceled)

33. (currently amended): The microdevice of ~~claim 1~~ claim 14, further comprising a detectable marker or a molecular tag.

34. (original): The microdevice of claim 33, wherein the detectable marker is a dye, a radioactive substance or a fluorescent substance.

35.-55. (canceled)

56. (currently amended): A kit for manipulating a moiety, which kit comprises:

a) ~~a microdevice having dimensions from about 1 to about 500 microns and comprising a substrate, a photorecognizable coding pattern on said substrate and a binding partner that is capable of binding to a moiety to be manipulated, wherein said photorecognizable coding pattern comprises a hole not penetrating through the entire depth of said substrate and said microdevice does not comprise an anodized metal surface layer;~~

the microdevice of claim 14, and

b) a chip on which a moiety-microdevice complex can be manipulated[[,]]

~~and wherein said microdevice comprises a magnetic material, or said binding partner comprises a cell, a cellular organelle, a virus, or an antibody~~ .

57.-66. (canceled)

67. (currently amended): An array for detecting moieties, which array comprises a plurality of microdevices placed or immobilized on a surface, wherein each of said microdevices is a microdevice of claim 14 ~~has dimensions from about 1 to about 500 microns and comprises a photorecognizable coding pattern on a substrate and a binding partner that is capable of binding to a moiety to be detected, wherein at least one of said photorecognizable coding patterns comprises a hole not penetrating through the entire depth of said substrate and at least one of said microdevices does not comprise an anodized metal surface layer;~~

~~and wherein said microdevice comprises a magnetic material, or said binding partner comprises a cell, a cellular organelle, a virus, or an antibody~~.

68.-117. (canceled)

118. (currently amended): The microdevice of ~~claim 1~~ claim 14, wherein the thickness of the substrate is from about 1 to about 200 microns.

119. (currently amended): The microdevice of ~~claim 1~~ claim 14, wherein the thickness of the substrate is from about 1 to about 50 microns.

120. (currently amended) ~~The microdevice of claim 1, which comprises a magnetic material.~~ A microdevice, which microdevice comprises:

a) a substrate;

b) a photorecognizable coding pattern on said substrate; and

c) a binding partner that is capable of binding to a moiety to be manipulated,

wherein said photorecognizable coding pattern comprises a hole not penetrating through the entire depth of said substrate,

and wherein said microdevice comprises a magnetic material,

and said microdevice has dimensions from about 1 to about 500 microns, and does not comprise an anodized metal surface layer;

wherein the substrate comprises a silicon layer and a metal layer;

and the metal layer comprises a magnetic material.

121. (canceled)

122. (previously presented): The microdevice of claim 120, wherein the magnetic material is a patterned magnetic material.

123. (previously presented): The microdevice of claim 122, wherein the magnetic material comprises nickel.

124. (previously presented): The microdevice of claim 122, wherein the magnetic material comprises CoTaZr alloy.

125. (previously presented): The microdevice of claim 122, wherein the patterned magnetic material is an encoding feature.

126. (new): The microdevice of claim 120, wherein the substrate comprises a silicon layer and a metal layer, and said silicon is silicon dioxide or silicon nitride.

127. (new): The microdevice of claim 126, wherein the metal layer is an aluminum layer.

128. (new): The microdevice of claim 126, wherein the metal layer comprises a magnetic material.

129. (new): The microdevice of claim 126, wherein the metal layer comprises nickel metal or CoTaZr (Cobalt-Tantalum-Zirconium) alloy.

130. (new): The microdevice of claim 126, wherein the silicon is silicon dioxide.

131. (new): The microdevice of claim 126, wherein the thickness of the substrate is from about 1 micron to about 10 microns.

132. (new): The microdevice of claim 130, wherein the substrate is a rectangle having a surface area from about 10 squared-microns to about 10,000 squared-microns.